1137 Gentiana from Butterfly val.

8 " " Soda Springs south of Lake Tahoe.

9 { It seems I sent you 2 species together A. Hartwegii and one you thought new. The other has larger, thicker, spotted, cordate leaves, larger flowers and loves dry sand; This is near streams of Butterfly val.

1140 Hills near Reno.

1 Road-side near Pyramid lake. (Has a disagreeable scent.)

2 Near Steamboat springs Nev. (Habitually crowded, as this specimen)

3 " " " (Also crowded like specimen)

4 " Pyramid lak. Washoe Co. Nev.

5 On hard cement. side of Webber Buttes near Sierra val.

6 Near summit of Leaf's peak, Eriog. marifolium, var.

7 Steamboat springs val. Nev. (E. Parongelia?)

8 " " " "

9 Near summit of Leaf's peak, in volcanic ashes.

1150 " " " Castle peak, Nevada Co. (Always clumped. Eriog. pyrolaefolium)

1 Streams of Sierra Cou., { Howe had no time to describe tree — as requested.

2 " " " { Too busy with centennial trees &c. to carfully examine — as I meant to do.

3 Pinus flexilis? Summit of Tallac peak. 11,150 ft. near Tahoe,

4 2 verses near Big Trees of Calaveras, 4 to 8 feet high,

5 " The only tall, (20 to 40 feet) oak of Sierra & northern valleys,

6 " Foot-hills and small ones in Indian valley Plumas Co. (my sendings to Dr. Vasey.)

7 Excellent forage grass. com. in valleys. (Has been omitted in ^

8 Marshy shore of Webber lake; average heights as shown

9 Indian val. and northward

1160 Side, near summit of Mt. Rose 8,900 ft connected by a high ridge to Castle peak. Only one plant, that about 4 feet around.

Grasses in "Register"

Notes on flowers from Sierra valley and vicinity, communicated. Jan. 28. 1876. by J. S. Lemmon Sierra Val. Cal.

(In 2 packages.)

№ 1066 Com. Reported once as "A. repens?" but fruit was asked for.

" 1067 Sierra val. Sent before but in too dry a stage.

" 1068 Pluto's gate bet. Reno & Carson on lava rocks. of a narrow, windy gorge.

" 1069 Butterfly valley

" 1070 High ridge near Reno. Nev.

" 1071 Grey's valley between warm-spring val. & Pyramid lake sandy points to 2.06 ft Abundant on

" 1072 Volcanic scoria shore of Pyramid. (This and the above reported new.)

1073 High ridge near Reno Nev. associated with № 1070.

1074 Sierra val. not abundant.

1075 " " & Webber lake val.

1076 Indian & American val. Plumas Co. Big-meadows.

1077 Sierra val. flowering all summer.

1078 " " & Webber val.

1079 Leaf's peak, " " peak. Nev. Co.

1080 Floor of Sierra val. sparse

1081 Webber lake val. near Castle Peak.

1082 Caseana valley. near Leaf's peak. Plumas Co.

1083 Webber lake val. " Castle " Nev. "

1084 " " "

1085 " " "

1086 Rhus vol. near Leapers peak.
1087 An Astragalus not before collected. Summit of Castle Peak, 8000 ft. Nev. Co.
1088 Sierra val. & Great Basin. root creeping.
1089 " " near Loyalton.
1090 Nr. Rose 8,600 ft. connected to Castle peak. Nev. Co.
1091 Webber lake val on peaks.
1092 " " " and Sierra val. among willows
1093 Side of the sierras on rocks.
1094 " " " " on high benches
1095 Sierra & Indian vals com
1096 " " " "
1097 " in one locality only. mud of warm springs.
1098 " Nr Webber lake. com.
1099 Reported 2 years ago "Arabis —? probably new. How is it? Indian val. 4 to 6 feet high.
1100 Webber lake
1101 Tellac peak near lake Tahoe
1102 Stanislaus river. Calaveras Co.
1103 Irrigating ditches. near Reno. Nev.
1104 Banks of Nohawk creek. Plumas Co.
1105 North end Sierra val. Plumas Co., on sand.
1106 Washoe Co. Nev. near Reno.
1107 Tellac peak. overlooking Tahoe lake.
1108 Sierra val. (Sent before but wish to identify duplicate.)
1109 Eagle val. near Carson City
1110 " " " " "
1111 Near Lake Tahoe,
1112 Near Carson City
3 " " " with № 1112
4 Foot hills. near Big Trees.
5 Sierra val. & Southward
6 Sierra and Great Basin. Is it Aster. or Machaeranthera?
7 A bit of a solitary plant by the road-side. Sierra val.
8 Near Big Trees. Calaveras
9 " " "

(2nd package.)

1120 Carson val com
1 Sierra " "
2 Near Big Trees. and Carson val. 2 to 5 ft.
3 Sierra valley. in grain fields. Rafinesquia?
4 Near Big Trees.
5 Sierra valley. com
6 " " in sloughs.
7 } These Pentstemons have been sent before, but were not
8 } reported upon. Is not one of them the supposed new one? (which is very common in marshes)
Both of Plumas Co. 1127 near Leapers & 28. near Quincy. is tall (2 to 4 ft) much branched. with few. yellow & purple flowers.
9 American val. near Quincy. (Sent before but unreported.)
9½ - Foot-hills " Big Trees.
1130 Haskell's peak near Sierra val.
1130½ - By some mistake marked on Watson's report "Glossopetalon Nevadense," (Pyxinoa Nev.)
1 Sierra val.
2
3
4 } Salvias from foot-hills near Murphys.
5
6

1229 Pellaea Bridgesii Mkte. of Meadow lake, near Webber. } Sent that
80 Cheilanthes gracillima " " " " } you may
1 " " " " " } note the
locality.

Sierra Valley, Sept 3rd 1876.

Dear Professor,

Many thanks for your reply & my last to Dr. Gray, and for your kind words. Glad the tired Dr. G. will take a holiday. Too bad about the new Bot. Cal. I write Judge (?) Hastings in vain. Where can I obtain a copy at any cost? I cant think of going into winter quarters at Webber Lake without it.

Above are a few note of plants sent herewith. I feel particularly humiliated on the record given of Astragalus Lemmoni, credited to Prof. Bolander "and apparently not since met with". I have coll. bales of it annually for 5 years, and know what it was for Dr. G sent me the "Contrib. to Acad." that described it in the exact Latin.

I lost credits on several other things by sending at first to Prof. Bolander instead of Dr. Gray. Prof. B. perhaps did not mean to omit reporting collector. He was never nearer Lassen's Peak than 80 miles. The Silene Lyarsenii & the Hulsea nana var. Lyarsenii were collected only by me. I had the pleasure of a glance at the Bot. Cal. at Santa Barbara, and notice several omissions. I have found Veronica Americana, V. scutellata, V. arvensis & V. serpyllifolia all in Sierra Co, also several other plants not noted.

I wish (since I must live without the new Bot.) that you would copy my last long list out of your books & forward, for the last Orders especially, it would be very helpful.

My health for several weeks has been bad, but if able I means to study & experiment thoroughly this winter, hoping to qualify myself for business that will pay a little. Dr. Parry kindly undertakes to determine & distribute our coll. of plants, sending them only where wanted. I will collect for seed again.

Again thanking you very sincerely I remain Yours &c. J.G. Lemmon.

Plants from Sierra Valley & vicinity, Cal.
Collected by J.G. Lemmon.

Lemmoni

No. 1186. A. Trifolium 3 to 7 leaved, which was reported from Howard 4 years ago as T. subcaudescens, but not described in new Bot. One locality only, Sierra Valley. Flat, spreading, the peduncle turning downward in age, while the flowers are reflexed upward. Curious.

No. 1187. Astragalus Lemmoni. Coll. in '72. Specimens communicated by Prof. Bolander. Abundant in north & western portions of Sierra val. After 3 feet across. Seeds sent abroad reported as growing (Keep you in mind. I should have been sent often, to

1188. Astragalus lentiformis. Coll. first in '73 in Clover val. afterward at several point in Sierra val. Reported as a var of A. Lemmoni, & more requested, to show connecting forms, &c, hence frequent sendings instead of A. Lemmoni.

1189. Hulsea nana. var. Lyarsenii. First Coll. in '73, with Prof. Case then in '75 with John Lyarsen.

First specimens sent to Prof. Bolander & by him communicated. Reported first as "H. algida var.?"

Volcanic ashes of Lassen's Peak.

1190. Eriogonum pyrolaefolium—rare Ashes of Lassen. (1149 of former lot;

1191 Ranunculus aliani[illegible]? ~~ar. Lemmoni~~? Webber Lake, var. alismifolius

The R. Lemmoni is abundant in high vals. and generally large & bright,

Kuigia (8.9ℓ × 11.30½)

№ 1192, Antirrhinum ——, Sent in '75, with Nev. Coll. but omitted in Report. Near Reno, Nev, and ravines near Pyramid lake,

" 1193, Cleomella parviflora, Gray " " " Not yet reported by you, (1023.)

1194, Gilia interrupta Webber Lake, Aug. '76,

1195 Lophanthus urticifolius " & other high localities

1196 Telesia monopetala minima, Torr. Pyramid val. (№s 898 of last sendings.)

1197 Delphinium simplex, var. Do - Benita Val,

1198 Calochortus Leichtlinii, Hookr. Webber peak & others, late-flowerg

1199 Potentilla Horkelia fusca — abnormal forms? Sierra val (Smaller - than P. glandulosa.

1199½ " fruticosa Near Webber lake. (Sent to be located.)

1200 " gelida? var. Peaks of Webber. Aug 24, '76, forma of P. Brewerii.

1201 Polygonum Shoshonense Webber & Castle peaks, abundant.

2 Eriogonum nudum, var. maritimum High peaks near Webber L. Aug 24, '76.

3 Gilia congesta, Webber & Castle peaks,

4, Echinospermum deflexum, var.?? Near Webber L. (Inquired for by Dr. Gray.)

5 Polygonum Lonchophyllum " " Collected also by Dr. Parry Aug 24, '76. (=707. Often seen but, it seems, omitted,

6, Chenopodium Atriplex —— Too young Sierra val.

7 Mentzelia Disperma Webber peak, Aug 24, '76,

8, A Cruciferæ from №s of Webber lake, " "

9, Troximon Empidonium glaucum " " & Sierra val.

1210, Polygonum coarctatum Near Webber & Donner lakes, (№ 277,)

Coll. also by Dr. Parry. First sent you ^ 1873,

Peucedanum(?) — n.sp.? Wanted in fruit.

№ 1211 Erigenia bulbosa? Not in new Bot, Sent you last season (№ 1098,) Found in only one locality, Sierra val, Early in Spring, in alkali mud, Unlike Daucus tuberosa,

1212, Nemophila rubella Near Webber lake,

1213, " Same, var. latiflora № 12 near " " (Coll. also by Parry,

14 Claytonia lanceolata (with the next,)

15, " triphylla Near Meadow lake, Alt, 8,000 ft,

16 Horkelia fusca Webber lake, (Is it H. parvifolia?

17 Galium trifidum, var. "

18 Ribes sanguineum, var. variegatum

19 Eucnide Andrewsii Sierra Val, (Coll. also by Dr. Parry, Do it Anderson's

1220 Arnica foliosa Webber lake,

1 Aster adscendens "

2 Ledum obtusatum, Gray. Nat,

3 Trifolium longipes " " val, low form

4 Abronia umbellata Sea shore at Santa Barbara very thick leaves, Fls, bright crimson, Will be sent you also by Miss Plummer of S. B. Living plants, or Magenta

5 Nailia ixioides? Webber & Meadow lakes,

6, Orthocarpus pilosus " " "

7 Aster Opp. lanuginosus " Lake & Sierra val,

8 Gilia linifolia " "

Notes of Plants sent Sept. 12th, '76 to Prof. Eastwood,

№ 1232. Silene montana Webber lake mts,

" 1233. Enothera dentata, var. grandiflora San Bernardino, Reported last winter as O. dentata,

" 4 Gilia — dianthoides ‖ High mts near S. Bernard,

5 " Palmeri We thought it n. sp. for a time, Dr. it G. densiflora? = 1167.

6 ~~Oxytheca~~ ? Near San. Bernard, - Centrostegia leptoceras

7 Agoseris aurea On surface of a stream near Santa Barbara, Mrs. E. E. Higgins,

8 Gilia coronalifolia Farm of Elwood Cooper near " ", J.G.C.

9 A crucifer from summit of Lafeir's peak, 1872, & 1875, Vesicaria montana

1240 Which is N. nivoalaris - & what is the other?

1 } Nemacladus tubulatus, n. sp. - but long ago collected by Wallace.
} Gilia micromeria — new find

2 Hulsea, from near summit of S. Bernardino, Injured by neglect while searching for a lost comrade — 2 days, Dr. H. Parry,

3 Draba aurea Injured at the same time as above,

4 ~~Karex~~ Cyperus inflexus Sierra valley, rare,

5 Eriophyllum lanuginosum " " on mts,

6, Carex Texella Butterfly " Plumas Co, with Darlingtonia,

7 Scirpus riparius Pool on ranch of Col Hollister Santa Barbara,

1248 ~~——~~ or Carex ~~Hoodii~~ Sierra valley, C. stipata J. Bailey. 1884

The crucifer was sent to Prof. Bolander 4 years ago and lost.

My dear Professor:

Again I send you a small package of plants to name,

Too unwell of late to collect, I have been cleaning up the herbarium, sending off promised plants, &c, so come upon these without a certainty of name yet. Hope you have copied my large list of last fall, and that it is on the way to me, Mrs Ames has not her "Bot. Cal." yet, and mourns deeply. By the kindness of Chas. Pringle of Vt, Mrs Austin has a copy. Good,

I hope you have despatched one to me by Ex, C.O.D,

Dr. Parry at home and hard at work. Did not stay at Colorado to collect Conifera seed, not bearing this year. This ought to give me a market for the firs & spruces here, which are bearing a little - about 1/4 as usual. I will write Prof. Sargent soon about the matter,

Hope Dr. Gray's party are enjoying a fine trip. Please tell him of my plants sent you. I hope he and Prof. Asa will get at the Cerices and Gramina I sent Dr. Vasey. I cannot more again collect such another fine lot,

My health is very poor, Suffer with a cough & headache, Nearly unfit for anything. If I recover, I will hybernate at Elsobon lake again to study & experiment, assisted by flowers books, and a costly microscope. A present from Santa Barbara friends

Please report on plants hereunto. Yours &c. H. N. Lemmon.

Plants from S. B. Lemmon,

Sierra Val, Cal. Sept 2nd 1877,

№ 1262 Gentiana —?, near G. Newberryi but several-flowered, &c, Sierra Val,

" 1263 Brickellia linifolia, Eaton Nev, desert,

" 4 Potomogeton —? " " in a hot spring,

" 5 Spyrogyra? " same " "

" 6 —?, rocky stream beds, Indian Val,

" 7 Eritrichium Kingii? (I've sent this plant to Dr. G. several times. It seems not well described. It is perennial, prostrate, running, in Sierra Val, damp ground, forming acres of carpet, ?

" 8 Rumex —?, Nev, desert, 2 ft, high,

" 9. Mimulus nanus? (Cannot this be Dandy Hills. separated from the little, low, purple one?

1270 Nitophyllum This word, copied from your report, so puzzled Dr. Parry Alkali flats, Nev. that I send again to make sure,

" 1 Trifolium Lemmoni, var, Turns its head downwards, the fl, reverting upward during estivation, Sierra Val, on Ivans ranch,

1272 Ranunculus Lemmoni Better spec. than sent before. The flower often 1½ in. across, abundant this season. S. Val.

" 3 Ranunculus repens?, very leafy, & smooth springy, muddy places, Sierra Val.

" 4 Crepis occidentalis var. cinnata G. This matures 2 months before the typical plant on same ground, Sierra Val.

" 5. Draba alpina var alpina?, Mt Lola.

" 6 Pentstemon Lemmoni, Better spec, Abundant on Downieville peak,

" 7 Hieracium —? " " near top. Seems diff. from any described,

" 8 Astragalus Austinæ Better spec, Acres of it on summit of Mt Lola, near Webber L.

" 8 Leucothoe Davisæ, in fruit, Downieville peak,

1280 Ivesia Gordoni var. frigida?. " " white fl.

" 1 —? (I've nothing on cryptogams.)

" 2 —? Curious sedge-like thing from springy places, Northern side of D. peak,

" 3. Sedge —? " " "

(Who is studying the Graminæ?

1284 Cuscuta —? Downieville peak.

My dear Prof.

Foregoing is a list & notes of a few more plants sent for various reasons, as stated,

Its strength permits I take short excursions, but hereafter must stay at home on the qui vive for the great botanists, Could not get out on the desert soon enough. Only found a few odd things, The Potamogeton is abundant in Gulling's hot spring north side of Honey lake desert, Syzygium also,

A 2 days trip to Mt Lola revealed several strange things & abundance of the new Astragalus Austinæ,

Another 2 days exploration of the gold-hearted Downieville, Butte gave us several rare or new things. The rest from Sierra valley,

Hoping you are well and that the Bot. Col. is approaching completion I remain

Yours sincerely J. G. Lemmon,

Plants from Dr. Lemmon
Aug. 1878.

No. 1400. Eriodictyon —? Plant 3 to 5 feet high, branching from base. lvs. strong-scented, lower 4 to 8 inches long; fls. creamy white, racemate!

If new please dedicate to Col. W. H. Hollister of Santa Barbara — a noble gentleman of distinguished ability and benevolence, — the peculiar patron of the poor & deserving. Ciudad Val. Monterey Co.

Clidamus Hollisteri. Col. belongs.

No. 1401. Herpestis? (Not in Bot. Cal.)

2. If Bergia how about the tubular calyx? If Ammannia latifolia what of the 5 distinct petals? Near Tulare Lake.

1403 Ammannia humilis Mx. — Myst. Calif.
No. 1402 ~~viscosa~~. 5 petaled! Yo-Semite.

1404 Artemisia? Clark's Ranch.

3 Heinrsonia near Merced.

6 Gilia. — floccosa? but petals yellow.

7 Chorizanthe — Palmeri near San Louis Obispo

No 1408 Chorizanthe diffusa ?

9 " membranacea ?

1500 (Composite)

1 Castilleja In wet grounds, 4 feet.

2 Lasthenia but fls. yellow!

3 (Blepharipappus scaber) Claytonia Chamissonis — bibbet bearing ovals of leaves

4 Veronica scutellata (Not in Bot. Cal.

5 Bolandra. So. Sierra, 3 places.

6 Heuchera (Carex) ovalifolia Gray Foot-hill streams.

7 Hemizonia — glandular-tipped leaves, terete, leaves.

8 Carex ? Cyperus inflorescence So Sierra

9 Cyperus Rhynchospora 3 ft Bank San Joaquin

1510 Juncus effusus, var. californicus always 3-parted, Kings R.

1 (Caryophyllaceous) Mollugo verticillata Chowchilla Ranch.

2 Linum micranthum near Mariposa

3 Hemizonia congesta ? but rays white, San Louis, C.

4 Madia — robust 3 ft. near Mariposa

5 Sequoiopsis Pohlmacostomum Tulare lake-shore

6 Polygonum near Mariposa grove.

7 Hemizonia (Calycadenia) yellow.

7½ " " is the white Mariposa ?

8 Chenopodium Botrys ? near J. D.

9 Antirrhinum coronatum at Clarks found only before by Hartweg.

1520 Composite So. Sierra

1 Potamogeton ? To Robbins Kings R.

2 Calochortus clavatus, n. sp. San Louis

3 Eritrichium Torreyi abundant in meadow at Clark's.

Lemmon

Plants from Shasta & vicinity.

×1431 Cornus ~~sessilis~~ from Mt. Mc Cloud river, (seemingly with 1 bract.)

2 ~~Pinnata~~? with finely-divided leaves, near a snow bank of Shasta,

1 3 Astragalus, ~~Shastensis~~? Side of Scott Mt. near Shasta, but pods pointed.

#11 4 Calandrinia, ~~sp.~~ near Castle lake west of Shasta. Belongs to the peri-culate section. None in Bot. Cal.

× 5 Orchidaceous plant, ~~Cypripedium~~ ~~Spectabile~~ from wood near Shasta, (fls white)

6 Viola cuneata! Near Shasta

1 7 Dicentra, ~~n. sp.~~ ~~macrantha~~ between formosa & uniflora, 2 × 3 fls. white, near Castle lake near Shasta.

" 8. ~~Erigeron~~ ~~Synoglossum~~ ~~virens~~ from woods of Shasta, flowers pink, lvs. narrow.

×1 9 ~~Ac. Shastensis~~ ~~sp. nov.~~ from Mt. Mc Cloud river, fls. small & white.

Californica, Gray

1440. Drilax. Mc Cloud river

1. Allium (Head-waters Sacramento river)

2. Makaylaea Bolanderi, in fruit, on a rivulet of Mc Cloud. (Found after much search & exposure to heat at 146° for 3 hours.)

3. Cypripedium Scotch camp near Dixon's, at Shasta. lip white, alae orange,

4. Clintonia? Scotch Camp. umbellata

5. Cornus. Dixon's meadow, Shasta. (in fruit)

6. Cycladenia tomentosa, with the C. humilis on Cinder Cone of Shasta. Confirms the species?

7. ~~Candollea~~? Dandy bottoms along the upper Sacramento. barbatus (Like similar from bottom to top.)

8. ~~Bolanderia~~ Calochortus nudus Dixon's Shasta

Habenaria elegans Scotch Camp. "

1450 ~~Hookeriana~~ Cypripedium? Dixon's meadow.

1. Pleuricospora fimbriolata, but corolla lobes longer than calyx Side of Shasta.

" 1452 ~~Stipa ?~~ Lipton's meadows.

× 3 Alnus incana, var. ~~glauca~~ with leaves (or galls) among the annuls. Lipton's near Shasta.

× 4 Pinus (flexilis) ~~Balfouriana~~ Side of Scott Mt. near Shasta.

1 5 Cornus ~~sericea~~ Lipton's, Shasta

×1 6 Ericus ~~Brewii~~ " meadows.

Plants of San Bernardino County.

1457 Erigeron. Side of Gray. Back.

× 8 Draba " " "

× 9 Orcutia, in tough sod. " "
depressed. white fl.

×1460 ~~Astragalus calycosus~~ ? Mt. of Gray Creek. 7,700 ft.

×1 1 An odd thing from San Gorgonia Pass. forming clumps of bushes 2 & 4 feet high. A corolla-like involucre enclosing the pistils, the stamens outside.

○ 2 Croton. California, ~~apparently~~ Am tired of waiting for 2nd ed. Bot. Cal. & tell me about the Apetalae.

Pathyrostes Schottii

× 1463 ~~Aplopappus~~ ? Side of Grey-back, 7,000 ft. alt.

× 4 ~~Eriophyllum squamatum~~ Bigelovii. Woods near Grey-back.

× 5 Thalictrum ~~fendleri~~ " " "

× 6 Eleomella ~~[illegible]~~ Colorado Desert.

× 7 Lupinus ~~Calcaratus~~ tayloriorum ? Can it be this sp. away down in San Bernardino Co.

+ 8 Platanus ~~racemosa~~ Near San Bernardino

× 9 Dalea Cal.ca ? (of Parry) in fruit. White-water river Col. Desert.

×1470 ~~Eriogonum~~ Senecio lugens. Near San Bernardino

×11 ~~Vilfa~~ ? Poa — ? " "

× 2 Chrysanthra pungens, 15 ft

+ 3 " spinosa, n. sp. " "

× 4 Hulsea. ~~Parryi~~ grana Torr " Grey-back, (nearly acaulescent,)

× 5 ~~Silene~~. Mts. San Bernardino.

× 6 Lilium Parryi. 2 to 5-feet high. sweet-scented, Near S. Ber.

× 7 Calochortus ~~luteus~~ nitidus San Bernardino.

1 8 " splendens "

J. G. LEMMON,
Sierra Valley, California,
Amateur Botanist, Lecturer, Microscopist and Collector in Natural History,
—AND DEALER IN—
Seeds, Bulbs, Roots and Dried Specimens of Rare California Plants;
—ALSO AGENT FOR—
The most popular and useful Microscopes, Telescopes, and their furnishings, Scientific Books, &c.

Cal., Feb. 16, 18

122. Astragalus alratus ?? West valley.

123. Ranunculus, micranthus — Low wet grounds.

124. Umbellifer. White-head glen, Pyramid lake,

~~124½~~ " Buffalo ~~canon~~ of Humboldt desert

125. " "Mountain meadows. near Lassen peak

126. Sanicula (not) tuberosa, see long tuberous

127. Umbellifer Surprise valley.

128 " Goose lake valley.

129 " "Mountain meadows" Plumas Co.

130 " Goose Lake vol. & Pitt river.

131 " West valley, on Pitt river,

132 " Near Pyramid lake. (We were too early for flowers or fruit)

133 " West valley, on S. fork. Pitt river.

134. Cruciferæ. Sand dunes. Humboldt desert.

135. Lathyrus — ? Pass between Indian vol. and Quinary

136 " High peaks of Warner range near Silver creek. Surprise valley.

137 Trifolium. Peaks (6.000 ft.) west side of Pyramid lake. Although resembling T. Andersonii this is very distinct, & earlier in flower though in much higher ground.

138 Lupinus ? Surprise valley.

(An extension of range.)

J. G. Lemmon,

Sierra Valley, Cal.

Amateur Botanist, Collector in Natural History,

AND DEALER IN

SEEDS, BULBS and ROOTS of Rare California Plants.

Sierra Valley, Cal., June 1879.

Plants collected April 23rd to May 28th '79. from Sierra valley to Goose lake Oregon. via Pyramid lake. Surprise valley the Humboldt desert & head-waters of the Pitt river. through Washoe & Roop counties of Nevada. & Plumas. Lassen & Modoc counties of California.

By J. G. Lemmon & Miss Sara A. Plummer

Perityphyllum ramosissimum Nutt.

No 1 A rosaceous shrub we think of the Amygdaleæ sub-order as it yields the flavor of Prussic acid & bears the other characters of the class. but in addition it has 2 to 5 carpels. (New genus?) (Bush 2 to 4 feet high with curving branches forming a tangled mass) Dry hills in Buffalo canon, N.W. to Surprise valley,

also in West valley & on the pass between Willow creek valley & Susanville, Cal.

No 2 Ceanothus, near cuneatus but not "upright" but decumbent. Every plant of it so. Mohawk val. Plumas Co.

No 3. Betula occidentalis from Surprise val. Cal. the whole trunk (12 & 15 feet high) red & glandular like the twigs,

4. Betula? Big Meadows. bark gray.

5. Cornus — pubescens? Buffalo cañon Modoc Co. (leaves attached by the middle)

6. Apiolospatium? Low, weak bush, with few flowers. Buffalo val. Nev. & West val., Lassen Co. Cal.

7. Heliospatalon Nevadense! Finely in fruit on original locality the west bluff (shore) of Pyramid Lake. Extremely local, & No one knows of other bushes. bushes & cropped by stock into compact clumps 2 to 3 feet

8. Ephedra Large, robust, gray-bark very distinct from E. antisyphilitica growing with it. West shore Pyramid Lake.

9. Eriogonum? — Peaks back of Whitehead's

glen, west of Pyramid lake. Apr 28. Rays a striking blending of pink & salmon.

10, Eriogonum from Buffalo cañon Lassen Co. May 1st (None matured.)

11. Senecio. S. Nuttallii? or N. S.? (immature plants.)

12 Balsamorhiza, with tubular rays. (occasionally) & leaves twice pinnate. Peculiar for the insects stupefied or dead, found within the corolla.

13. Crepis? How can this be a var of occidentalis? so different, and grows with it. This from Sierra valley,

14. Troximon, Eagle Lake. Lassen Co.

15. Antennaria S. Rhea dimorpha? pubescence of akenes not bi-uncinate as I can detect.

16, Cruciferum multicaule Surprise valley, Cal.

17, Castilleia, Eagle lake. Lassen Co.

18. & crucifer from Surprise valley

19. Crucifer Long val. & Surprise,

20, " Alturas plains. South fork Pitt river.

21. Astragalus obscurus? West valley. Modoc Co.

If anything cultivable is dedicated to me I will be overjoyed and not proceed to give it away, as formerly, for it comes down upon me (when too late, perhaps,) that honest-earned honors are the principal profits in botany, & I may be privileged to earn but few more.

My cultivable finds all bear other names (and more worthy names than my own,) but many friends desire that my name shall be connected with some showy species.

Our principal hope for novelties is in the cherry-like shrub, the ceanothus, the red-barked Betula, some of the umbellifers, the clover, the Lupines and the ferns. The latter unpalatable also and not to Eaten.

I am off to-day for San Bernardino to explore certain peaks with W. G. Wright my prized friend of that place.

I shall be at home in 2 weeks when I hope to receive a report from you of those plants with many "N. Sp." in it.

Yours faithfully
J. G. Lemmon.

J. G. LEMMON,
Sierra Valley, California,
Amateur Botanist, Lecturer, Microscopist and Collector in Natural History,
—AND DEALER IN—
Seeds, Bulbs, Roots and Dried Specimens of Rare California Plants;
—ALSO AGENT FOR—
The most popular and useful Microscopes, Telescopes, and their furnishings, Scientific Books, &c.

Cal., 18

(2nd Sheet.)

139. Lupinus not like arborens. Yellow-flowered & dwarf, from American valley, near Quincy
140 L. laxiflorus? (N. B. bracts persistent.)
141 " Brewer? West val. Pitt river.
142 " heterocarpus? Indian val.
143 " — ? Near Quincy, Cal. Always of same size & abundant in the locality.
144 " parviflus? Surprise val. on dunes.
145 " Grayi. (Sent to show extension of range. Yo-semite to Lassen.)
146 Brachyscome from Eagle lake. Plumas Co.
147 " Illinois? Quincy, ranch, near Quincy.
148 Erigeron. Buffalo. cotton —?
149 Collomia heterophylla. Indian val.
150 a small cruciferæ. Surprise val.
151 Phacelia Ivesiana. Can it be this? away up in Surprise val.

52) Erythrichium Kingii? Dry sand dunes common. annual or biennial.

53) Erythrichium? that you once called E. Lemmonii. Sub-aquatic. perennial. forms large dense carpets, acres in extent, in Sierra val. along streams.

54. E. West-val. Fill rivers.

55) " Sand dunes Surprise val.

56) " " " Sierra val

57 Hemizonella Big - Meadows.

58 Conanthus? Dry sand dunes Surprise val. & near Susanville,

59. Mimulus " " above

60. Psilocarphus? Indian val.

61. (Composite) Surprise val.

62 Riccia fluitans? Streams of high valleys. in the current.

63. If this fern is Cystopteris it is different in form than any we have heretofore seen Forms large mats on the lava beds above Pitt river and from West valley to Winter & Marsh's ranch on Madaline plains. It appears to be a Cheilanthes. in autumn marginal. specially seen on last years fronds. leaf. it is new.

64. Crepis. just picked up from a hill near Webber lake, but recently left bare of snow. June 3, '78.

Sierra val, June 4, '78

My dear Dr.

Foregoing are the most of our finds that are suspicious. There has been so little snow or rain in the north and the spring was so cold there was but little vegetation out, but what appeared was seized though amid storms of snow & wind, at times.

Miss Plummer proves an excellent explorer with keen vision & skillful hand. In case some suitable thing in our coll. prove distinct I strongly urge that she be honored — both in recognition of services now, and for several years of laborious but unrecognized work in Southern Cal.

Should anything from West val. prove distinct I should like it dedicated to W. D. West Esq. of Loyalton Sierra valley. by whose liberality we were much assisted in our outfit.

J. G. LEMMON,
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Sierra Val. Cal., Aug 6, 1879

My dear Prof.

By this mail I send a package of plants directed to you this time, as you seem to be always at home.

They comprise some of the rare forms collected both in Southern Cal, and around Shasta.

In San Bernardino Co, I was fortunate in finding [illegible] I called it Parry's Lily & brought home many bulbs. Can you help [illegible] sell them?

Has Prof Gray [illegible] to see if my new [illegible] viridula found on the Colorado Desert.

of these plants and formerly without examination.

Mr Lloyd Bridges Collector for B B Redding

[illegible] for 6 months, and will be [illegible] long as he keeps [illegible] do it there may [illegible] you will see [illegible] Phacelia Calandrinia.

Will send one to Prof, Gray, [illegible] large Eriogonum [illegible] more quite showy.

[illegible] to call a detail [illegible] of the Harvard Herbarium [illegible]

Prof. Watson has not kindly favored me with Wheeler's Report.

I suppose you & Dr. Engelmann will be very busy at work upon the Mex. Plants collected by Parry & Palmer.

Yours truly

Both these ought to be very valuable.

I scaled Grey-back the highest peak in S. Cal. but found few new things.

Returning I went up Mt. Shasta into a region so near to Oregon that I found several plants not described in Bot. Cal. & I hope also, some that are new.

A beautiful fern I have forwarded to Prof. Eaton.

In this package for you I am particularly interested in the Dicentra, the Calandrinia the Godetia & the Carnels.

But a few days ago I [illegible] Trillium for [illegible] with a [illegible] & Alcoholic & [illegible] have it. [illegible] for [illegible] & many specimens for [illegible] Cal. [illegible] section many are the same as those I've met with me on Mt. [illegible] & [illegible] with you,

All this I've learned by a beautiful [illegible] with [illegible] for [illegible] for [illegible] for [illegible] for [illegible] & [illegible] for [illegible] scientific [illegible] & [illegible] & [illegible] & [illegible] & I am indebted for many special favors of late.

Perhaps you will [illegible] & [illegible] & [illegible] & [illegible] plan, & nearly cost me my life. I had but a limited time for search and the mercury stood at 14 d.° & suffered frostbite followed by [illegible] of the [illegible] for [illegible] you [illegible] & [illegible]

Oakland. June 10th 1881,

Rec'd + replied
Nov. 15/81

Dear Professor.

Home again, tired nearly sick but bringing our sheaves with us.

Now we go up to our old home in Deer's valley to rest a few days, then off for Salt Lake. Return here again before the end of this month, & reorganize for the autumn campaign southward again.

But in the meantime we wish to hear from you and others whom we have left in our dismal exile in the desert.

How did your northern collection turn out? How many N. sp? How many changes of old species? divisions? consolidations? &c &c.

We have had no time & study a plant all this summer, and as for that we have little & study from, only a few of the many books necessary.

So we have hastily selected some 200 specimens & forward (in 2 packages,) by this mail. Some we hope all new or at least are rare. The ferns are so well described by Eaton that we do not send specimens tho' we have a fine large lot.

The grapes may come later, Cacti & most of the trees, Yucca &c. are send & Dr. Engelmann, who poor man! has been prevented from coming this season. Mueller has kept the place in good order, is well & hearty. He joins in best wishes & kind regards to you & Mrs. &c.

Arizona, New Mexican & Texan
Plants with a few from S. California,
Collected March to June, '81, by J.G. & S.P. Lemmon.
Submitted for determination June 10th 81,

No 110 Delphinium aprenum, Hbr. Is this Greene's N. Mx.?
Santa Catalina Mar. 28,

111 Viola Canadensis, var. Along streams summit of Sta Catalina,
in dense pine forest. Apr. 30.

112 ~~Lepidium~~ Thlaspi alpestre, L. Side of Dos Cabezas. May 25,

113 Cruciferae Draba Caroliniana, Gray On an island of Rio Grande near El Paso,
(May be introduced) May 15.

114 Lepidium alyssoides, Gray Same as above (on sand wash

115 Cleome? Polanisia graveolens, Raf. What Cleome is this so near
Cleome as Saltbush (near Stockton) undescribed
Nine for. Ap. 23.

116. Mollugo verticillata Banks of El Rialto S. side of Santa Catalina
(Aug 80) and Ap. 26. 81

117. Portulacaceae Claytonia ambigua Cham. El Rio. Cal. on plains Mar. 26,

118 " " Sand Wash near Santa Catalina May 10,

119 " Philoxerus, R.Br. " Ft Bowie Ariz. " 20,

120 Cerastium longipes, Gray Santa Catalina 5,000 Ap 10.

121. Acer (grandidentatum?) Along stream in the
dense pine forest on summit of Santa Catalina.
Ap 30. Yields good sap for sugar. 20–60 ft high with
a dia. of 1–1½ feet, dark bark, long spreading limbs.
(A similar maple reported from Dos Cabezas.)

122 Glossopetalon spinescens, Gray (On summit of Organ
Mts. Ft. [illegible], south [illegible]

Fort Bowie, Arizona. " 25-

Mt. Santa Catalina, foot-hills. Alt. 8.

" " " 4-

" " Tucson, Arizona " 10-

" " Mt. Santa Catalina, Ariz. " 10-

" " Mt. Santa Catalina, Ariz. " 10-

" " Tucson, Arizona " 10-

" " Mt. Santa Catalina, Ariz. " 10-

" " Mt. Santa Catalina, Ariz. " 10-

" " Tucson, Arizona " 10-

" " Tucson, Arizona " 10-

" " Tucson, Arizona " 10-

" " Mt. Santa Catalina, Ariz. " 10-

" " Mt. Santa Catalina, Ariz. " 10-

" " Mt. Santa Catalina, Ariz.

No. 275 - Echinocactus Wislizeni, Engl. Western Sand-hills of the Pecos Riv. Texas
" 276 " " Plains on N. Slope of the Ft. Hills. Texas.
" 277 " " " Prairie hills at Ft. Lancaster. Texas.
" 278 Peniocereus greggii, Engl. Ft. Lancaster, Texas. Sept. 6
" 279 Pediocactus simpsonii, Engl. Sand-hills near S. S. Ft. Stockton. Texas. Apr. 5
" 280 Echinocereus [illegible] Western slope of Hills. Texas.
" 281 Cereus [illegible] "Canyon" of Rio Grande. Texas. Sept. 15
Do varieties - and two species of Cereus. Texas.
" 282. Do Two another species of Echinocereus?
Purple flowered - Ft. Davis. Texas. Sept 22
283. Echinocereus [illegible] Ft. Davis " " "
284 Cereus [illegible] Canyon Texas
285. Opuntia [illegible] Ft. Davis Texas
286. Opuntia [illegible] Near Eagle Springs. Texas
Nov 15
287 Echinocereus Rio Grande. Ft. Duncan Texas. Sept 5
Also near Laredo (Brown Co. Engelm. [illegible]
288. Opuntia [illegible]
289. Opuntia [illegible]
290 Opuntia [illegible] Bonneau, Texas
291 " [illegible] " "
292 " — ? (pink ") N. S. Ste Ft. Geneva mod. Oct 27
293 [illegible] " " " " " " "
294. [illegible] (Comanche Pk. " " " 1/2
295. [illegible] Dead Mountains. Texas
296 Echinocereus [illegible] Ft. Davis Texas Oct. 28
297 Agave [illegible] Eagle Springs, El Paso Texas
298 " Shottii [illegible] Ft. Davis Texas
Large bulbous fragrant-flowered [illegible] 4-6-8-) ft. high. One of the
Sap plants of Texas - much used!

369 Hieracium Mt. E. Rucker val.

370 Aster ericoides near Ft Bowie, Apache P.

1 Hymenothrix wrightii " " "
2 Grindelia squarrosa, Camp Rucker, Rucker val
3 Aster canescens Hermitage, Rucker val,
4 Verbesina prodocephala Apache Pass,
5 — — — — in Rucker valley -
6 Hymenothrix Wislizeni " 4
7 Encelia near Dos Cabezas peak.
8 Cosmos bipinnatus floor of Rucker valley.
9 Tagetes micrantha stream Apache Pass,

380 Solidago Hermitage, Rucker val.
1 Verbesina Apache Pass
2 Berlandiera stream banks of Rucker valley, (lost my large specimens,) They were 2-3 feet high, robust habit. leaves most ovate oblanceolate 10-12 inches long, mostly radical in a large rosette,

---

The Rucker valley so often written about is a large secluded region in the south end of the Chiricahua range 40 miles from the border, & 60 east of Tombstone. Only one inhabitant now a hermit claiming the upper part of the valley for a future stock range. He lives for security in the mouth of a tunnel. He shared his quarters with us for three weeks, enabling us to make good collections.

Apache Pass is 40 miles north of Rucker & 15 south of the R.R. In it is Ft Bowie where we stopped as guests 2 days & Mrs Cord for several weeks. The commander of the fort extended distinguished favors, &c,

Compositæ

from the Chiricahua mountains of Arizona,

Collected Aug. Sept. & Oct. of 1881,

by J. G. & S. I. Lemmon,

"1889" Senecio Greenei Gray, 1880, S. side Santa Catalina sent each year.

№305 Brickellia Near Rucker valley.
6 " " " " "
7 Encelia Plains near " "
8 Brickellia Hermitage " "
9 " (Lemmoni, Greene) " "
310 " grandiflora, Hermitage. " "
11 " Mts E. of " "
12 " Kendleri " " " " "
13 " betonicifolia " S. " " "
14 " " N. " "
15 " " " " " "
16 " grandidentatum " E. " "
17 " " N " "
18 " Carmenatia " S. of Bowie " "
19 I cannot place this in it genus
~~320~~ High forest on top of a mountain on the east side of Rucker valley

320 Stevia Mts. N. of Rucker valley,
1 " in shades, " " " "
2 " meadow " " " "
3 " serrata ? " & " "
4 Baccharis Hermitage " "
5
6 " Sand wash. Plains near " "
7 = (213) " high Mts. N " "
8 Aplopappus laricifolius on high rocks S. " "
9 Erigeron ? Isabellae Mts. N " "
330 Gutierrezia Euthamiae Ft Bowie Apache Pass,
1 Galinsoga. Plains near Apache Pass,
2 Bidens in Spring, Hermitage, Rucker val.
3 " near Ft Bowie, Apache Pass,
4 " " " "
5 Heterospermum tagetinum " "
6 Zinnia ? (N Sp ?) streams. Rucker val,
7 " Alberti. Apache Pass. " "
8 Schkuria Hopkirkii Plains near " "
9 Aster multiflorus in Spring. Hermitage " "
340 " at " " "
1 Actinomeris angustifolius Mts. N. of " "
2 " on limestone rocks, Ft Bowie
3 Viguiera laxa " " "

344 from Apache Pass,
5 Gymnolomia multiflora ? Rucker val,
6 top of peak S. of " "
7 Hymenothrix Wislizeni Apache Pass,
8 Senecio Douglasii ? " "
9 Xanthocephalum gymnospermoides Hermitage Rucker val,
350 Aplopappus gracile Apache Pass,
1 Villanova chrysanthemoides " "
2 Actinella (N Sp !) = Plumeria " "
3 Solidago Hermitage Rucker val
4 " " "
5 Artemesia Canadensis " "
6 Hymenatherum Mts N. of Apache Pass,
7 Pectis longipes (Perennial !) " "
8 Artemisia Ludoviciana Rucker val,
9 Porezia Arizonica Mts, near Apache Pass,
360 " Wrightii ? " of Rucker val,
1 " " var. albus " " "
2 Brickellia " "
3 Eupatorium Berlandiera Apache " "
4 Brickellia Mts " "
5 " glandulosa " "
6 " grandiflora Apache Pass,
7 Erigeron flagellare, " "
8 near Ft Bowie, in " "

4 0 Euonia ~~europtopolia~~ Hermitage Rocker val
Mache Pf.

Croton. — ?
Liodia
Gompherena nitida ♀ var. rosea.
Chenopodium commune, Bth.
Amaranthus Retroflexus — wild
Boerhaavia diffusa
" Plains near Hermitage
" Hermitage, Mache Pf.
Cayaponia ~~Cissus~~ Plains near
" Hermitage, Mache Pf.
Boerhaavia erecta, var.
" Hermitage. Rocker Val
Mirabilis = 456 = by Hermitage
Eriogonum elatum, Hermitage. Rocker Val
" Hookeri Hook. Black Hut, Mache Pf.
Aromalia ? Simpson Creek — Pretty thing is also a gigantic Spiranthes.. Plant 1 — 2 ft high. Leaves. Bright green. fls. greenish yellow turned one side. Rare — in Hermitage ?
Amaranthus retroflexus, just in flower, Sept. 22,
First detected by Mrs Hemmon
Allium ~~cernuum~~ Hermitage Mache Pf.
Asparagus Forresi, Hermitage " " "
Polygonum aviculare, L. Dr Bowe " "
" Delicious near Hubbard Peak
Not ~~done~~ identified

4 8 2 Eriogonum ~~plumatella~~ Cedar Gorge Mache Pf.
x 3 Polygala ~~Cruciata~~ Hermitage Rocker val
" 4 Asclepias Linifolia " " "
x 5 ~~Asclepias~~ Berard Lith. plumosa, var. Mache Pf.
x 6 Asclepias ~~tuberosa~~ " "
x 7 Hydrolythrum Virg. Cedar Tanyon Canyon
x 8 Asclepias asperulus var. Torr. Bourd Mache Pf.
" 9 Asclepias " " "
4 9 0 Amaranth Rocker val
" 1 ~~Convolvulus tricolor~~ Mache Pf.
x 2 Salvia ~~Lindheimeri~~ " "
4 9 3 (Rubiaceae) Hermitage Valley Ave " "

4 9 3. Asch. & Gebr. (Syn. 1, 1867) ♀ + ♂ P. Summer

Eriogonum
Hosp.? Hermitage, Mache Pf.
Sisyrinchium parviflorum, Mill
at
Liquidambar macrophyllum, Boeff
Liquidambar Styraciflua, Linn
Hermitage
Asclepias
Asclepias
Asclepias

=201

=404

=400

=251

=206

=232

=234

Plants sent to Cambridge
from the collection of 1881, by J. G. F
[illegible] Arizona.

Cracca Edwardsii, Gray, var. [illegible]

Coulteri, Benth

Galactia – too poor = 146

Emoryi, Torr., var

Emoryi, Torr, var. [illegible]

Emoryi, Torr (typical)

Tephrosia [illegible], Gray

Cracca Edwardsii Gray – new var. glabella

Sida filififormis S. Watson, var.

Galactia tephrodes, Gray

Colopogonia longifolia, Gray, var. erect stems

Rhamnus acutifolius, Gray

Colopogonia longifolia, Gray

[illegible] angustifolius.

A. [illegible]

Richardsonia rosea, Forsk.

[illegible] Viola. Like V. sarmentosa
[illegible] Rocky Valley
[illegible] Lubricalma Island. adsc.

601. Polygala? or Carlo-Wrightiana?
Santa Catalina Island. May. J. O.

602 [illegible] Island. [illegible]
[illegible] Col. Nelson Collection
[illegible] Hacelea, [illegible] Coult. Eff.

603. Hippiscus Coultery, Gray
[illegible] cinerascens, Gray

604. [illegible] barbicalyx, Gray, var.

605. "

606. [illegible] dispermus, Gray

607. Galactia Wrightii, Gray

[illegible] microphylla mountana, Rattan.

608. [illegible] tyrata, var. macrophylla

609. [illegible]

610. [illegible] Dumosa, Gray

611. "

612. "

613. [illegible] Rothrockii, Gray, incd.

614. " asperrimum, Gray

105 species

(2)

1 " 2627 Hymenopappus ~~scabiosaeus~~ ! L'Her.

Ft. Huachuca canon. Summit of mountains near Camp

1 " 2628 Helianthus ~~[illegible]~~ argyreus, Mey

Ft. Huachuca. On moist ground near stream bed.

1 " 2629 Berberis ~~[illegible]~~ pinnata, Lag.

Vicinity of Tanner's canon. Ft. Huachuca.

1 " 2630 Hymenoxys (Actinea, Gr. Bot. Mex. Hieracioides Don.) Hoffmanni, Greenm.

Plains near Ft. Huachuca Arizona

1 " 2631 Solidago ~~[illegible]~~ aurea, var ~~[illegible]~~ apparently

"Tiger Cave" Mountains Ft. Huachuca Canon. Foothills.

1 " 2632 Pinaropappus stoloniferus, Gray ! ~~[illegible]~~

Near Observatory, Summit Canon. Rare.

1 " 2633. Gnaphalium ~~[illegible]~~ aureum, Vahl

Banks of N.S. north of Ft. Huachuca June 1

1 " 2634 ~~Stylochaeta~~ Hedyotis longifolium, Watson

Tanner's Creek, Ft. H.

1 " 2635 Hedyotis micranthum, Watson " "

1 " 2636 Hedyotis linearifolium, Watson

"Tiger Cave" Ft. Huachuca Mountains

1 " 2637 Stanleya pinnatifida, Nutt. !

Foothills Ft. H.

1 " 2638 Machaeranthera, sp.

{Cleome integrifolia, Torr.

(2)

1. N. 2639. Linum leo. mexicanum, Greene (Syn. Fl. p. 1 v. 1)

Comunis nomen Lino - Ing.

„ 2640. Polygala Lindheimeri, nov. sp. !

Cruz nativa - Mex.

„ 2641 „ Linum mexicanum, var. = 497

Indianola, Tex.

„ 2642 Linum sulcatum, Riddell, var. Engelmanni

Comunis nomen Ing. - Tex.

„ 2643 Cassia obtusifolia, L.

Cruz Comunis nativa, Mex. Comunis

„ 2644. Sesuvium sessile, Pursh ! (Ind. ad Lincoln)

Cruz nativa, Mex. Indianola, Tex.

„ 2645. Samolus valerandi, L. var. Americanus

Cruz Comunis nativa, Mex. Indianola, Tex.

„ 2646 Sisyrinchium mucronatum, Michx. (Fl. Bor. Am. 1 p. 23)

Cruz nativa, Mex. Indianola, Tex.

„ 2647 Salvia Lindheimeri, Gray (Proc. Am. Acad. 8 p. 628) = S. Lindheimeri, Gray var.

Cruz nativa, Mex. Indianola, Tex.

„ 2648. Cassia procumbens, Lam.

Cruz nativa, Mex. Indianola, Tex.

„ 2649. Cassia Roemeriana, Scheele. !

Cruz nativa, Mex. Indianola, Tex.

" 2661. Pellandra sabulosa, Nutt. var.

" 2662. " humilis, Benth.

" 2663 Oligomeris longifolia, Gray

" 2664 Reseda Mariana, Linn.

" 2665 Reseda alnifolia, Nutt. R n. sp

" 2666 Reseda Edwardsii, Nuttallii

" 2667 = 2665 " var. ignota, Nutt. ?

" 2668 Nemacladus Nuttallii, Gray

" 2669 Nemacladus rigidus, Benth

" 2670 " oblongifolia, Benth.

" 2671 " arida

J. 1693 Lista Leopoldi, Gray

J. 1694 " polygonoides, Gray ?

J. 1694 " cylindrica, Gray.

J. 1695 " lachnostachys, Gray (in part)

J. 1696 " nana, Torr. (copy)

" 1697 " Hieronymi Gray. not found

J. 1698 " Listeri, Gray. two forms

J. 1699. Vicia sarcocarpa, Grunn (Lista sarcocarpa)

J. 1650 Ergthrina corallodendron, — Tz.

J. 1651 Galactia Brownii, Ait (Galactia tenuiflora W.)

Colutea Lemmoni, Gray, n. sp. near C. cruciata, Hornst.

J. 1653. Tephrosia tenella, Gray

No. 2682½ ~~Gr. Costa~~ Phaseolus acutifolius, Gray (P. parvulus, Torr.

Torrey's Bot. Exp.

" 2683 Rafinesquia ~~Virginiana~~ concinnus, Agardh, var 1?)
collected also by Pringle in the Sta Rita Mts.

Torrey's Bot. Exp.

" 2684 " Schweinitzii, Nutt.

With leaves of Brachyramphus, Spl.

" 2685 " affinis ! (Large, but not intermediate)
on one specimen — they are entirely otherwise, as usual.

San Bernardino, Cal. Wright.

" 2686 Hoffmannia bracteosa, Benth.

Sierra Cal., Bourgeau.

" 2687 Desmodium ~~Mexicanum~~, Gray

Comstock's Creek Aug.

" 2688 Sachsiana pedunculata, L. - var

Comstock's Creek. Torrey's Exp.

" 2689 Vicia pulchella. H.B.K.

Ft. Huachuca Cañon, Spl.

" 2690 Mimosa ~~dysocarpa~~ Wrightii, Benth.

Torrey's Exp. Bot.

" 2691 " Emoryana, Benth.

Torrey's Exp. Sierra Cal.

" 2692 " ~~Lemmoni, Gray~~.

Mimosa Lemmoni, Gray, n. sp.

Ft. Huachuca Cañon

1. 2692 Linnæa = 2692 in print.

Carex vaginata Tausch. Sundsvall Lapl.

1. 2694 Muscorum hepaticæ, Sm.

Juncus castaneus Sm. Lapl.

1. 2695. Cobresia Scirpicina, Gray

Scirpus caespitosus L. Sundsvall Lapl.

1. 2696. Epilobium tetragonum, Willd.

Juncus filiformis L. Lapl.

1. 2697 " " tau.

Agrostis canina L. Lapl.

1. 2698 Leersia oryzoides, Swtz.

Cinna arundinacea L. Lapl.

1. 2699 Potentilla Thuringii, Sm.

Juncus trifidus L. Lapl.

1. 2700 " rivalis, Swtz.

Juncus castaneus Sm. Lapl.

1. 2701 Juncus Hostianus, F. Gr.

Juncus castaneus Sm. Lapl.

1. 2702 Sedum Anglicum, Huds.?

Juncus filiformis L. Lapl.

1. 2703 Carex Cæspitosa pumila, Swtz.

Carex paniculata L. Sundsvall, Lapl.

dumosa, Gray

Aralia humilis, Cav.

trifoliata, Salisb.

Oldenlandia Greenei, Gray — n. sp.

Bicornecarpus parviflorus, Gray

Spermacoce exserta, Cav.

Mitracarpum brasiliense, Gr.

Cuscuta Wrightii, Gray

rubra, Cav.

" " Wrightii, Gray

" " Lindheimeri, Buckl.

" " A. Mexicana sp. — var V. corbipolium, HBK.

72 a/p.

Compositæ

Calliopsis

Coll. Schaj. Cat. III.

N. 2729. Steria amabile!

Steria

Tetragonotheca

Helianthus occidentalis, var. trinervis

" trichotis, var.

" grandiflora, var. petiolaris

" Pringlei

Xanthocephalum gymnospermoides

Chrysopsis villosa, var. Rusbyi

1740 Brickellia apaeanthera

" Eupatorioides, var. diversifolia

Aster Potosinus

Xanthocephalum trichotis

Memorabil
Missionaria, mr.
Historia
Aster Virgatus
Helenthus Lamarckii
Neottianea
Origanum, n. sp
Gremilla Discolor, n. sp
Gentiana
angustifolia, mr
Graphalium Origanifolium, n. sp
Myosotis
Ambrosia artemisiaefolia
Lasiurida
Helianthella Quinquenervis, Asiyonica
Leucolepis
Petrolaria

multiflora

Achillea Corymbosa

Thunbergii

Anthemis

Melampodium Longifolium

Heterotheca pringlei

Haplopappus

Meonophalus

Pechàimpatiens

" Ludwigiana, pur

" Germania = (1. Hardwigii)

" ernestschulzei ?

" Zolocanica, v. modestus

" n. sp.? near Tiliaepilosa

" Hilaris

" Shelfordia modesta

" nitidiventris var. magnaefasciata

" modesta

" Arizonica

" modesta var. atlantica

" Kellyorakii

" Melanosoma hirsutum

" Antigonica

" [illegible]

" Fraterna

Page 15 of Composition

Brachyrhiphium

Aurea, var. major

as nyctiginiflorus

Brassa brachystephana

Lemmonii

glaucescens, Wats.

Gonolobus pogonanthus, Hemsl

Asclep. Mexicana

—— Eomphrocalyx hypoleucus

Hook. chemophylla

" quinquedentata

prodromus

!

's

—— Bigelovii, n. sp.

calycosa

!

Macombii

Lithos Coloradense, Gray

multiflorum

Buchanica [elongata]

Sibirica

convolvulus scipium

Thunbergii

" ———— ! Linkianus, var

" cuneifolia, Lav. n.sp

" Mexicana

" nivicola

" lemnonii, Lav. n.sp

" cantabrica, Lour

" tauricus

" Argonautae

—— Bachmannia cylindrica

" "

" —— Margyrantha mollissima, Gr. n.sp

" lanceolata, var linata

" Palmeri, Gray — var

Sarcoba umbellata Gr

Rhenophyllus, Gray

" obtusa, Gr — n. sp

" linearioides

Californica

minor

Calophanes decumbens, Gr

—— connexa, Var. Bolanderiana

Artemisia, Sv. m cp

Hemizonia, Sv

!

Salvia apicata, R. & S.

— Stachys coccinea

— Dudleya, towards plicata

!

— Oxypolis ungustifolia, Small

— Eryngium, Sp.

— Asimina triloba, Dun

Mitracarpus hirtiformis, Benth. = 2723

= C. hispida, Mikl.

hispida, Mikl. (C. echinata, Murr.)

C. acuta

Cyperus Schweinitzii, Torr.

Scirpus Olneyi, Torr.

Eleocharis acicularis, Torr.

2915 J. G. Lemmon is Muhlenbergia glomerata var brevifolia Vasey

2918 " = 732 C. Mohr.

2923 " Stipa fimbriata, H.B.K.

2937 " Milium racemosum Lemmoni.

POSTAL CARD.

WASHINGTON JAN 26 5 PM 83

U.S. POSTAGE ONE CENT

NOTHING BUT THE ADDRESS CAN BE PLACED ON THIS SIDE.

Fr. Da Gray
Beverly
Mass.

Plants of Arizona.

Collected during 1881, 1882,

By Profs. E. D. Cope & J. T. Rothrock 1875 Franklin Mts. (Arizona, Col.

(Pony-Indian,)

1 & 2 Col, Sisymbrium Diffusum, Gray

2. Draba sharpioides, Gr.

2½ Draba Douglasii, Hook

3, Galium confusiflorum, Greene – de Lost in part

4, Vitis incisa, Matt.

5, Vauquelinia Torreyi, ! !

6, Fraxinus trifolia, Dr

7, Sida Diffusa, HBK.
(S. filifolia, Moric.)

8, Sida spinosa, L., v. angustifolia, Grisb.

E, Sphaeralcea angustifolia, Spach.

10 Galium

11 "

12 "

13 "

Calliandra ——?

3014 Acacia

15 Acacia constricta, Btth.!

16 "

17 " Gonzalea Gray

18, Lysiloma tenuiflora, Gray

19, Calliandra eriophylla, var.?

20, Acacia Lauricata, Gray - var.?

Or is there another? = your 34 (1660).

21, " Brachystachys, Gray

22 " " a wild developed form

23, Desmodium cinerascens, Gray

24, " gramineum, Gray. (Linear bro) Very rare

24½ Psoralea Rothrockii, Gray

25

(Gramática)

Composición.

Nº 3025. Tipología

2 C. Castellana?

2 " Valenciana

2 " Pidima

2 " "

(2767) " De Lérida

3 ~ 3 C. Franseria

3 1, Pactis " Roselly P.

forma

3 2, Sintaxis

3 2, Sintaxis simple.

3 4 Partículas modos.

3 5 Análisis

D. C. Compositæ

3036. Grindelia [illegible] Along streams [illegible]

37. Baileya [illegible] Agua Verde, Hualapai [illegible]

38. Baeria [illegible] Pringlei, Brandegee
(Orcutt collected it)

39 Hymenoxys Reddingii (if new,) [illegible]

[illegible] stream [illegible], [illegible]
[illegible] not described but near to the one [illegible]
"Synopsis Art. N. A." page 210, [illegible] is [illegible]
discovered by Palmer on the Gila [illegible]
Arizona, [illegible] collected,
through very long and erect
very large and beautiful species
I gratefully request that it be [illegible]
after Hon. B. B. Redding, late Att'y Gen'l of
one of the most useful and [illegible]
Pacific Coast, N. Mex.
How it figured for the Pacific Rural? to be first
read before the Academy of Sciences.

3040 - ? I cannot make this [illegible] in any
order in our [illegible] but it is a new species of
Cordia in the Borraginaceæ,
the S. [illegible] of [illegible] but [illegible]
and the [illegible] The branches terete [illegible]
Pat. Prof. Ramon, Santa [illegible]
41, Borraginaceæ. I do not succeed in putting this with
any of the genera of "Syn. Fl. N. A."
[illegible] near Cave Creek, Santa Cat. Mts.
The plants were low, the branches slender and prostrate
and I gathered them at first for Lithospermum
incisum but not that, and I find no
species with hairs entirely [illegible]

42, Echinospermum Redowskii, 2-3 ft. high, [illegible]

43. (Echinospermum?) [illegible]
[illegible] Pacific [illegible]
mountains, Mont. Ariz., Santa Catalina
Mts. quite showy. Purple.

44 Cryptantha thamnophila [illegible]
Is this the typical [illegible]

3045 Cryptantha [illegible]

Apetala

N° 3047, Euphorbia spergulina, Gray

48 Chamaesyce paniculata, Rich " " " " "

49 " viscosa, Lag. " " " " "

50 Mirabilis oxybaphoides, Gray " " "

51, Boerhavia [illegible] " " "

52 Jatropha cardiophylla, Mull

53 Jatropha angustidens, Mull.

54 Manihot angustiloba, Mull

Manihot Carthaginensis, Mull.

55 " [illegible] Stapf.

56 Euphorbia prolifera, Ait.

57 Chamaesyce hypericifolia, L.

58 Aristolochia brevipes, Benth., var. acuminata, Wats.

59 " "

60 Mentzelia

Ulrich id Ulrich ?

61 Cottea pappophoroides, Kth

Carex Michauxiana, Muhl. Gram. 257, 1817. Culm slender, 2°-3° high; leaves narrow (2"-3" wide) long pointed, scabrous, the sheaths smooth; staminate spikes two or three together on a slender peduncle 2'-5' long, their scales appressed, mostly obtuse or nearly so, usually erose; pistillate spikes cylindrical (5-" broad) mostly loosely flowered towards the base, the lower on exserted stalks; perigynium setose-hairy, conspicuously nerved broadly ovate at the base, tapering rather abruptly into a cylindrical beak which is tipped by nearly upright short teeth ( ), twice or more as long as the ovate scale. — Rather dry places throughout the Northern States east of the Mississippi. A form with nearly lanceolate perigynia from New York (Sartwell & Dewey) is var. turbinata, Dew. var. inferior, Carey, Perigynium smooth, teeth usually shorter, pistillate scales longer, and sheaths scabrous — New York (Sartwell & Booth) to Illinois (E. Hall)

var. Deweyi. Leaves scabrous; staminate scales very acute; perigynium smooth, ovate-lanceolate, not strongly nerved, spreading; teeth mostly short; scales very acute about the length of the perigynium. Nebraska, Big Sioux & yellowstone, Hayden, Bismarck, Dakota, A. B. Seymour, and Northward.

306? Panicum ——— ?

Pappophorum wrightii, Watson

Leptochloa mucronata, Kth

Triodia pulchella, HBK.

Panicum?

Bryanus ciliatus, L

Panicum obtusum HBK

307? Hymenia paniculata, Watson

307 & Hackelochloa amicicidum,

C. Trichocarpa

var. imberbis, Torr. Man 1867

var. Deweyi
C. breviuscula Dew Sill. Journ. XXIV. 47 1857

var. aristata R&Br Frank. Nar. Aspen. 764 1823

C. nivata, Dew. Wood Bot. 893. 1848

(Duplicate Report)

Plants sent to Dr. Gray May 13. '74.

Coll. from April & May 12th in Mohave val. (either near Waterman's residence 4 mill mls or Calico – a mining town.) & in Cal. and near Grand Cañon of the Colorado at Peach Springs. Ariz.

Calico is 6 mi. N. of Daggett, Calf., Newberry Spr. is about 13 mi. east.

No 3114 Streptanthus Peach Sp. (Not sent)

3115 Linum gellow. near Calico. May 11.

3116 Astragalus. Ap 27. Grand C.

3117 " (short pod.) Newberry Spring. Mohave, May 10.

3118 " Nuttallianus? Calico. on dry summit. May 11

3119. Psoralea. Calico. May 11

3120 Dalea. near Watermans on Mohave riv. May 10

3121 " " "

3122 " " "

3123 " Near Needles. "

3124 " Grand Cañon Ap 27.

3125 Eriophyllum " " an annual!

3126 Eupatorium " "

3127 Nicolletia occidentalis. Mohave val. May 10 decidedly a Y.

3128 Pyrrocoma Cooperi? near Fort Mohave. Ap 24th

3129 Senecio near Ft Mohave annual! Ap. 12th

3130 Senecio Grand Canon &c. Ap 27.

3131 Nemacladus (small) Mohave May 10

3132 " (large). as above These plants at all stages of growth seem distinct in characters of stem. leaf & fl. &c.

3133. Gilia setosissima Ft Mohave. Ap

3134 Phacelia rotundifolia Grand C. Ap 27.

3135 " pauciflora? Ft Mohave. Ap 12.

3136 Nama corrugata N. Sp! near Calico May 11.

3137 " rosea N Sp! " same locality & date.

3138 Erythraea Near Calico May 11

3139 Amsinckia vernicosa var. near Calico May 11.

3140 Cryptes? same place & date.

3141 Mimulus Mohavensis N Sp! near Watermans May 10 " Calico " 11.

Flagstaff, Anz. July 15, '84

My dear Dr. Gray.

I wrote you a hurried note from town yesterday, and included a few brief notes concerning the plants sent you in the large package May 13.

As I look over Cate letters I see how much you need certain items inquired for if you have failed to get my first note so I hasten to supply a few. They may reach you in time since none of our things are yet published.

I will only take up a few of the plants about which you have inquired.

No 3116. Astragalus Mohavensis A Gr. Gray Grows in large depressed masses in a cañon south of Newberry Spring in Mohave val. May 10th '84.

3117 Astragalus acutirostris Gray MS. Above the Calico mines in dry rocks. May 11, '84
This is the one I inquired about doubting that it could be Nuttallianus.

3119. & #146. Singular that I have never heard of these two Psoraleas, Castorea & mephitica. In what are they published?

3120 Dalea — ? A very large shrub but low, 2-3 ft. Above Waterman's mill, Mohave val. May 11, '84.

Please add to Watson Flora & collect. No 4152 Oxytheca ?

Several times morning and evening but never found the ninute pl. often. Could locality, not-remember the Land-think it can be any form of C. microcarpa.

2

3125 Arnoldara. It puzzles me to call this annual plant growing on the sand at the side of the Grand Canon, "C. albicaulis" when in Bot. Cal, that species is described "stems herbaceous from a perennial running root-stock," a character which I've noticed abundantly in Cal.

Please examine this specimen again.

Grand Cañon Aug 27, '14.

(This one has loose bark, while the cafence is broader at base, than in C. albicaulis &c.)

Plants from northern Arizona and New Mexico including the Great Plateau of the South West, between the two rivers, Colorado & Rio Grande, and ranged by the Atlantic and Pacific R. R. on the parallel of 35° N. Lat.

Mostly from the great pine forest around the San Francisco Mts. Collected by Wm. R. Ware M.D.

Summer 1882 & Oct. 1884.

1200 | Juniperus pinnatifida - n. sp. | Pinnacle Mesa, pine belt, near Flagstaff Ariz. | Aug. 1882.

1201 | " occidentalis, Hook | Cosnino Mts. Ariz. | " " "

1202 | Juniperus Cosnino - n. sp. | Oak Creek near Flagstaff on rocky ridge. | Sept.

1203 | Pinus ponderosa, Calif. var. Washoensis | on the San Francisco Mts. | "

1204 | Steironema ciliatum | Oak creek, in swamps near Flagstaff. Sept. fruit.

1205 | Koeleria nitida, Torr. | Pinnacle Mesa | June.

1206 | Calliopsis atrosanguinea, Torrey | " | "

1207 | Solidago multiradiata, var. | San Francisco Mts. | Aug.

1208 | Cirsium undulatum, Spreng. | Oak Creek Sept.

1209 | Chlorogalum pomeridianum, Kunth | Pinnacle Mesa | "

1210 | Eriogonum racemosum, Nutt. | " | "

1211 | Echinocereus triglochidiatus, Engelm. | " | "

1212 | Opuntia spinosior, Engelm. | Oak Creek Canon | Sept.

1213 | Solidago nemoralis, var. | Pinnacle Mesa | Aug.

1214 | Stachys Nuttallii, Gray | " | "

32 15	Le Teal-on Bridgeville, Ky. Bills Hollow, Nat. Area, Ohio R.	Ang.
32 16	Antennella Rockcastle Co. on top of Hillsboro Cliffs,	"
32 17	Allium mutabile, Mx. on Dix River, Boyle,	"
32 18	Calamintha Clinopodium, Nutt. Le Tanyard Fork,	"
32 19	Allium Nuttallianum, Rock creek near Kingsdale.	"
32 20	Eryngium hemiptilum, Torr. Le Tanyard Fork.	"
32 21	Astragalus fallax, Hornem	"
32 22	Eriocaulon [illegible]	"
32 23	Panicularia hirsuticulmis, Kze.	"
32 24	Polygonum ramosissimum, Mx.	"
32 25	Asplenium pinnatifidum, Nutt. Cliff on dry ravine	"
32 26	Eriocaulon septangulare, With. Le Tanyard Fork,	"
32 27	Panicularia nitida, Nutt. var. (P. pallescens, Scribn.)	"
32 28	Eriocaulon [illegible] Catalpa Creek	"
32 29	Cuscuta Gronovii, Willd. var. compacta, Engelm. 354 (in part),	
32 30	Chrysopsis villosa, Nutt. var. canescens,	
32 31	Salix rigida, Muhl. var. macrocarpa, Anderss.	
32 32	Astragalus [illegible]	
32 33	" (Astragalus Canadensis?)	
32 34	Valeriana pauciflora, Nutt. Bills Hollow, Nat. Area, Ohio	
32 35	Elaeagnus argentea, Pursh, Madison Co. Ky.	
32 36	Eriocaulon [illegible]	
32 37	Thomasii, Torr.	

Eastern Himmy, Vol.

3795 Cyrtopteris [illegible] Head Spring [illegible]

3796 Oxytropis campestris, var. [illegible] Head Spring [illegible]

3797 Cystopteris [illegible] " " "

3798 Astragalus [illegible] " 6-10 ft high " "

3799 Astragalus [illegible] " on hills " "

3800 Phacelia [illegible] " " " "

3801 Erigeron [illegible] low, full flowered " " " "

3802 [illegible] " "

3803 [illegible] [illegible] " "

3804 Arnoseris [illegible] Head Spring " [illegible]

3805 Phacelia [illegible] Head Spring " "

3806 Carex [illegible] " "

3807 =5336 Astragalus [illegible] " "

3808 (Astragalus) [illegible] on hills, very curious.

3809 Asclepias [illegible]

3810 Erigeron [illegible]

3811 Aliciella [illegible] Head Spring [illegible]

3812 Eriogonum [illegible]

3813 Pentstemon [illegible] " "

3814 Astragalus [illegible] " "

3815 Astragalus [illegible] " [illegible]

3816 Astragalus [illegible] " "

3817 Hymenopappus [illegible] " "

3818 [illegible] " "

3264	Lecanora tolurecanus, v. microlobus	Dom. Francisco Mts.	Dom.	J.
3265	" multilobatus, 2 sp.	Peach Spring	"	Dom.,
3265½	" var?	Dom. Fran. Mts.	"	Ang.
3265	Lecanora Agriculella, brown		"	"
3266	Ramalina ? Se. de la Bergen Peak,		"	"
3267	Lecanora aquatica		"	"
3268	Physcia ?		"	"
3269	"		"	"
3270	Parmelia ?		"	"
3271	Physcia Hasseana, Nyl.	Bergen Peak,	"	"
3272	Heliophila quinquenervis, var. Arizonica	Cliff	"	"
3273	Physcia	Flagstaff (good forge)	"	"
3274	Lecanora Arizonica	Hill	"	"
3275	Physcia	Cliff	"	"
3276	Physcia	Flagstaff	"	"
3277	Astragalus	Rydb. in Proc. Col. Acad. Sci. 84.		
3278	Parmelia Hillii, Tuck.	Bergen Peak.	"	"
3279	Cladonia furcata, Willd.	"	"	"
3280	Lecanora pulchella, Borr.	"	"	"
3281	Solorina saccata, var. crocea	Ach.	Ang.	
3282	Lecanora fastigiata	"	"	"
3283	Peltigera	"	"	"
3284	Lecanora	"	"	"

3286 Sed. dasyphyllum Burdg. creeks Pathe. mts of Tat. Agassiz. Ag.

3287 Talinum Middleton, Torrey T. sarcof. Mt. Agassiz 0,000 ft. "

3288 Cerastium alpinum, L., var. " " "

3289 Arenaria biflora, Walter " 12,000 "

3290 Silene acaulis, L. " 11,640 "

3291 Saxifraga Hirculus, Willd " 12,160 "

3293, 3294 Draba aurea, Vahl - pale yellow flowers - dense cushions 11,120, 11000, from Mt. Agassiz

Potentilla Richardsii ? P. diffusa " 9,000 "

3295 Saxifraga cespitosa, L. " 11,640 "

3296 Arenaria Rossii, R. Br., var. hirta " 11,640 "

3297 Dryadanthe Breweri, Gray " 11,000 "

3298 Saxifraga adscendens, L. " 12,000 "

3299 Saxifraga Nelsoniana, D. Don S. debilis " 11,500 "

3300 Erigeron Breweri, Watson

3301 Erigeron [illegible] "

3302 Antennaria [illegible] Pacific Slope "

3303 Castilleja

(A few species of Gramineae follow on the [illegible] ridge east (east [illegible] Mt. Agassiz.)

3304 Poa [illegible] Pacific Slope

3305 [illegible] Mt. Agassiz "

3306 Phacelia [illegible] " " "

3307 [illegible] " " "

Arenaria macradenia, Watson

3307 [illegible] A. stolo-clot Agassiz. Am. Asp.

3310 Achillea biternis Comp. Peak & Spring cañon " Sum.

3311 Collinsia verna Spring val. 1st Dilgreaves " Sep.

3312 Potentilla crinita var. Ledebouria Bergner Park, Dan Tracts, " "

3313 Clarkia [illegible] Shady bank of stream Spring Val near Dilgreaves

3316 (Lilaea scilloides var. ramosa Hook. Meadows, Wet, Alpine Peace and Tree)

3317 Alsinopsis gracilis Valentine val. Rocks ft hill. Arc. Sep.

3318 Eriogonum villosum, var. flavum " " " "

3319 Draba Near Fox Volcano " Sep.

3318 Bazzia dongonotiformis Comp. Ledebouria Bergner Park, S. W. slope, " Sep.

3319 Polygonum idahoense nana, Mutt (Si-ab) " " "

3320 Polygonum Hemizonium, Nutt " "

3321 Phacelia tricornis, Gray Near Emerald Cañon " "

3322 Potentilla [illegible] Peak Spring " "

3323 Aquilegia Eximia Volcano val. Col Asp.

3324 Astilbe Near Bergner Park Aspen, Sep.

3325 Eriogonum inflatum, Torr. Emerald Cañon " "

3326 Astragalus (Wheeler) Ark. Val. " Jul.
Cephalica A. Kaibabensis, Rocky ridges [illegible]
[illegible] 11,000 ft.
[illegible]

3327 Astragalus Peak Spring on hills Aspen, Sep.
Gray

3328 Pentstemon Parryi " " "

3329 Astragalus [illegible] (not seen)

3330 Pentstemon crinitus Bergner Park, " Aug.

3331 Talinopsis brachyphylla [illegible]

3337 Asclepias Near Laguna [illegible] Ariz. Jul.

3331 Euphorbia [illegible] Ash Fork, Ariz. "

3332 (?) A fine annual foot long climbing by petioles on trees & fences in Indian villages [illegible] flower [illegible] Jamaica.

3334 Arenaria Near Cerro de La Vargas Peak, Ariz. Sept.

3335 Silene antirrhina, Linn. Near Sitgreaves, Arizona Nat. Agassiz 11,000 ft. Aug. very large & freely, good forage.

3336 Chamaesaracha Coronopus (Dun.) Gray Near Peach Springs Ariz. June

3337 Syntrichia obtusa, Lesq. & Jam. Near Sitgreaves Nat. Agassiz " Aug.

3338 Physcia crinulata, Tuck. Plains east of " in decia " "

3339 Evernia cognizans, Nyl. Only known at present & fast [illegible] on logs of Cove-dwellers peak, east of Mt Agassiz, Aug.

3340 Lecanora Franconiana, Tuck. Near Sitgreaves Nat. Agassiz, Ariz. "

3341 [illegible] " Cross Canon " "

3342 Peltidea canina, var. [illegible] Plains east of Mt Agassiz " "

3343 Stereocaulon paschale, Fries " " "

3344 [illegible]

3345 Physcia integra (Flot.) & fast [illegible] widely [illegible]

3346 Parmelia prostratum, Nyl. Near Sitgreaves Nat. Agassiz, Ariz. Sept.

3347 Lecanora [illegible] Cole creek near Flagstaff " Aug

3348 Evernia incompleta, Tuck. ? Ash Fork, " "

3349 Physcia hispida, Tuck. ? Mineral Park, Ariz. Sept.

3350 " retendifolia " " "

3351 Ophioparma Ventosa, Tuck. [illegible] " "

3352 [illegible] Calycium, Tuck. ? " "

3253 Pailachis Coulteri, Gray. Ash Fork Ariz. July.
3254 Astragalus Shaftiarpii, Gray. Kendal. Nov. " "
[illegible] Melanocrinum dioica " " "
3255 " " Mrs. Williams " "
3256 Agave Wheeleri, Engel. (Ariz. Spring Canon & Grand Canon of the Colorado.
3257 Dodecatheon Meadia, var. Frank's Spring near Kingman. Ariz. June
3258 Phygelanthus (Penstemon?) Newberryi, Gray. Side of Bear Wallow Mt. in Grahams next of Mt Graham, Ariz. Alt 9,000 ft. Aug. [illegible] seed imperfect

3259 Astragalus Coulteri, Watson. Ash Fork, Ariz. July.

Here Dr. Gray & Prof. Watson are the names and notes of 150 plants, forwarded for names to day (Oct. 13th 84.)

Perhaps I could study out a few plants if time permitted but we have agreed to make an exhibit of Pacific Coast grasses & other plants at the Mt. C. fair and we may thus collecting, mounting & labeling.

Please send the determinations to me here (1106 Oakland,) and the letter will follow.

Have busy finishing up field studies for the fair, the joins is named regards to Hale.

Yours kindly but carefully [illegible]

Plants sent to Prof. Watson - Apr. 12. '84
(Collection of 1884. mostly.)

4169 Streptanthus — Peach Spring. Jne. '84
Is this the true S. cordatus?

" "

4171 " " Peach Spring, Jne. '84
(not in bud or fruit!) Thel. longifolium v.

4172 Stanleya. Capsules of a large flowered
Coll. in ut. & Col. [illegible]
[illegible] [illegible] [illegible] of the common
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]

4174 (Eriastrum primitinum, Gr. Peach Spring, Jne. '84,
4175 Calochortus Kennedyi, " " " "
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]

4113 } Trifolium [illegible]

4114 " [illegible]

4115 } " [illegible]

4113 } [illegible]

4114 Arabis [illegible]

4116 [illegible]

4115 [illegible]

4117 Vesicaria } V. alpina Nutt? Peaks, [illegible]

4118 ? Mountain View Station, near Williams, June '84

4119 [illegible]

[illegible] Eriogonum [illegible]

4121 " [illegible]

4122 " [illegible]

multiplaudatum, var. sparsa

rimosiatum

aromaticoides, var. with large heads

us Douglasii?

Gramineous

bullata

Linearifolium

ramosus, var.

Candollianus Lemmoni
mss.

rostrata

canescens

" robustulosus

Prox.a: Interruptus, vor Cryptostylus

glandulosa

ic Douglasii

ic Lindleyi.

ic Bigelovii, var.

Bigelovii, var.

elegans

var. Coultersi

~~Lindleyi~~
~~Douglasii~~

Douglasii

11

= P. dasinoides Engelm

Pedicularis lanceolata

var

Aspicum calycinum

Linnis

glandulosa

Calif.ª

Pattii

var. alpestriflora

Douglasii

occidentalis, var.

arachnoides

lycopsoides

aphanostachya, var. tenella

Fremonti

~~Senecio~~ Malacothrix Clevelandi

luisana, n. sp.

---

gispidissima = 4606

---

cuspidosa

foliosus, var. tenuissimus

!

45 92 Brodiaea terrestris Near L. ranch June '87

83 Eschscholtzia dry On the adobe lakes of our ranch " "

84 Eriogonum { At Baron Schroeder's ranch 30 miles north S.L.O. on dry hills, very peculiar in the expanded end of its leaf. If this is E. virgatum I have not met with it before.
citharaeforme

85 Senecio ~~multiplex~~ eurycephalus ; Lemmon ranch, June '87.
If as above it is a far western locality.

86 ~~Senecio perplexa~~ Microseris Douglasii too young & tall, Lemmon ranch " "

87 Godetia viminea { On our ranch. I cannot make the Godetias fit nicely into the descriptions you assign in Bot. Cal. This form is a low spreading dark red one.

88 Monardella Brewerii { Near M. lanceolata but bracts not cross-veined nor calices not hirsute within.
On sandy plains near L. ranch, June '87

89 ~~Madia Wrightii~~ var. Kellogii Cholame S.L.O. Co. " "

45 90 Hollisteria { Forms of Hollisteria abundant in Cholame Val. & especially on the hills enclosing it. No doubt a good genus with its peculiar two lobed involucre. Flowers a long time, from May to Oct.

91 Microseris Douglasii On the hills of Cholame, June '87
Perhaps desperate M. Douglasii

92 Phacelia brachyloba ~~Amsinckia tessellata~~ ? L. ranch Cholame, " "

93 Amsinckia ~~tessellata~~ Lemmon " " " "
grandiflora - large flowered

94 Disysmbrium reflexum, " " " "

95 Phacelia ciliata ! Hill sides " " " "
Scarcely ciliate, becomes 1-2 ft high.

96 Chorizanthe rosulata Near Cholame, June '87

97 Chorizanthe Californica " " "

98 Chorizanthe pungens. Sea shore at Pacific Grove Monterey Co. June '87

4556 Calamintha micranthoides, Lopez cañon near S. L. O. June '86

66 Allium ——? near L. ranch. " "

67 Godetia viminea " " "

68 Lessingia glandulifera, Wats graveolens A. Gr. On the Lemmon ranch. " "
very heavy scented. Inner bracts purple-tipped &c.

69 Eschscholtzia Near S. L. O. on the hills. June '86

4570 Phacelia Douglasii probably = 4544.) Near L. ranch. " "

71 Phacelia distans, Bth " " " " "

72 Thelypodium Lemmoni, Greene, in "Bot. Gaz. Scientific" of Aug. '87.
On adobe hills of our ranch; from a few inches to 5 ft. high.

73 Lupinus nanus L. ranch June. '86

74 Microseris ~~linearifolia~~ Linleyi "

75 Lupinus microcarpus! " "

76 Microseris Douglasii with globular fols. " "
On adobe hills of Lemmon ranch. "

77 Calochortus Obispoensis Several forms. On Bishop peak
and others hills about the town & S. L. O. Prof. Greene criticises my name but I hold that it is appropriate as growing from Bishop peak — as well as the other places.

78 Calochortus elegans. On hills near S. L. O. June '86
Very striking in situ. Fades in drying.

79 Helianthus annuus on dry adobe lakes of L. ranch June '87
Often 6-8 ft high. and very leafy.

4580 Godetia tenella Near S. L. O. on hills June. '86

81 Malvastrum exile, Wats Hills of Lemmon ranch. " '87
Near M. rotundifolium but fls. not globular but compounded

7

45 99 Chorizanthe diffusa Dan Luis Obispo Co June '87

4600 Chorizanthe Palmeri " "

1 Chorizanthe stativoides

2 } Plagiobothrys ~~imaxcus~~ Cholame val. " "

3 " " " " "

4 " tenellus, Gray " " "

5 " canescens " " "

6 "Cryptanthe hispidissima" Greene, in Pittonia Vol 3 Los ranch. " "

7 Hemizonia ~~laxiflora~~ fasciculata ~~too young~~ On our ranch. May 87

8 ~~Hemizonia~~ Broximon = 4566? too young. On our ranch. May '87

9 Phacelia circin^a, var Near Cholame. June '87

10 ~~Hemizonia~~ Broximon grandiflorum "

4611 Layia glandulosa — ~~virgata~~ heterotricha "

12 Dicentra Near Cholame
Seems different from D. chrysantha. "

13 Krynitzkia ~~virgata~~ Near Cholame June '87

14 Stachys ajugoides Estrella creek, near Cholame "

15 Godetia ~~Hall~~ Near San Luis Obispo "

4616 Phacelia distans Near San Luis Obispo. June '87

17 " tanacetifolia " "

18 Brewerias Common v. S. Catalina. On dry adobe lakes, Cholame. "

19 Lupinus Chamissonis Cholame. "

4620 Chorizanthe membranacea. Our ranch. "

21 Pentstemon heterophyllus Near Paso de Robles. Cal. "

22 Monardella undulata! Arroyo Grande " "

23 Calochortus splendens Hill back of Paso Robles. "

24 " venustus " " "

25 " venula var. " " "

26 " " " " " "

27 Riggiopappus leptocladus var. longiaristatus Near Cholame "

There, I have been so hurried about this package that several duplications have occurred and moreover I had not room to place the plants out and classify them, hence all the orders in confusion.

We start this P. M. for San Diego to make arrangements for exploring the peninsula of Lower Cal. for a year or so, as an offer is before us. Please write always to Medical College, Oakland. for this is our permanent address.

Dr. Brandegee